Abstract of the Disclosure

A sliding gas-tight seal on an access port promotes insufflation of an anatomical space formed in tissue at a surgical site only during insertion of an endoscopic instrument through the access port into the anatomical space, and promotes deflation of the inflated space upon removal of the endoscopic instrument from within the access port. An inflatable balloon disposed about the port near the distal end may be selectively expanded to seal and anchor the access port within an incision through which a surgical procedure with insufflation is to be performed. Multiple resilient seals may be attached to the body of the port, and an auxiliary resilient seal may be inserted within the aperture of a seal attached to the body to accommodate a wide range of endoscopic instruments of various exterior dimensions inserted through the seals.